

A TABLET in memory of Dr. John E. Sweet, professor of mechanical engineering at Cornell University from 1872 to 1879, was unveiled on April 5 at the Engineers' Club, New York. The tablet is the gift of the American Society of Mechanical Engineers in

tribute to one of its founders and presidents. Dr. Sweet, who died May 8, 1916, was the inventor of the straight-line engine and, at the time of his death, one of the most widely known mechanical engineers in the United States.

## SCIENTIFIC EVENTS

### EXHIBIT OF WEIGHTS AND MEASURES AT THE SOUTH KENSINGTON MUSEUM

A NEW and permanent exhibition has been opened at the Science Museum, South Kensington, to illustrate the historical development of standards of weights and measurement. The London *Times* states that the exhibit occupies the whole of the entrance hall facing Imperial Institute Road and the long ground-floor gallery which leads into it. In the vestibule is a series of instruments arranged to display the principles of the equal-arm balance, the steel-yard and the more complicated recent mechanisms which extend the applications of the lever principle.

The earliest exhibit is an authentic Egyptian equal-arm balance of 1350 B. C., with a wooden beam and a cord pivot suspension, such as is still used in the bazaars of India and in China. One of the original stone weights accompanies it. A Roman bronze balance and steel-yard are shown (both in replica), and a number of glass weight standards of the Early Middle Ages. The methods of suspension by cord, by the less accurate ring device, by the gallows-and-pin, and by the knife-edge are shown both in the working specimens and in a series of transparencies in the adjoining gallery, while a number of skeleton models designed by Mr. W. A. Benton, of the Avery Historical Museum in Birmingham, display upon a small scale the various improvements made within the last few centuries to allow large weights to be measured with great speed and accuracy.

Certain turning-points, such as the Roberval "static enigma" of 1669 and Wyatt's cart-weigher of 1740, have affected the whole of modern practice in large-scale weighing machines, but though the models of these are interesting more attention perhaps will be drawn by Mr. Benton's reconstruction of the two self-indicating balances designed by Leonardo da Vinci in a manuscript now in the Bibliothèque Nationale.

The companion collection of instruments of measurement is of more recent date, since the invention of the micrometer can not well be traced beyond William Gascoigne's micrometer designed in 1639 for astronomical purposes. Important instruments such as Watt's eighteenth-century micrometer, Whitworth's measuring machine of 1855 (the first to indicate a

millionth of an inch) and the comparators recently developed by the National Physical Laboratory through the use of a beam of light, can be seen and demonstrated in the gallery. Three important standards of length lent by the Royal Society are Graham's standard yard of 1742, Bird's standard 90 inches of 1750 and Shuckburgh's 5 ft. standard of 1796. It was by the use of these that the Standards Commission of 1843-55 was able to connect the standards now in use with the Elizabethan yard, after the destruction of the Imperial standard in the 1834 fire at the Houses of Parliament.

### THE PROPOSED MEDICAL CENTER IN BROOKLYN

AT the semi-centennial dinner of the Alumni Association of the Medical School of the Long Island College Hospital plans were announced on April 26 for the establishment of a medical center in Brooklyn, N. Y. The plan, which includes separation of the Long Island College Hospital from its Medical School, calls for the organization of a new medical college to be associated with nine Brooklyn hospitals. The physical equipment of the combined units will cost more than \$100,000,000.

The new institution, for which a board of trustees has already been chosen, will apply shortly for a charter as a medical college. It has voted the first \$500,000 toward an endowment fund to meet the educational law requirements for the organization of a collegiate institution in New York State.

Dr. James C. Egbert, president of the medical school that is being discontinued, is a member of the board of trustees of the new institution.

The plans for the college include the erection of a central building which will be located in mid-Brooklyn and which will be easily accessible to the hospitals involved in the plan. The site has already been selected. The building which is to be erected within the next five years will cost, according to an estimate made by Dr. Egbert, more than \$3,000,000. The plans of the board also call for an immediate endowment fund of at least \$1,000,000.

The central plant and its affiliated hospitals will take care of at least 400 medical students. Courses in the first two years will be given at the central building. In the last two years students will receive in-

struction at the central plant and at the affiliated hospitals.

Of these hospitals four will have intimate contact with the college and be represented on its board. They are the Brooklyn, Methodist Episcopal, Jewish, and the Long Island College Hospital. The present teaching arrangements with the city hospitals in Brooklyn, including use of clinical material by the third and fourth-year students, will be maintained.

#### THE SUMMER MEETING OF THE SOUTHERN DIVISION OF THE AMERICAN PHYTOPATHOLOGICAL SOCIETY

THE Southern Division of the American Phytopathological Society will hold its annual summer meeting from June 11 to 16. The arrangements for the field tour are under the direction of Dr. L. E. Miles, *chairman*, and L. M. Fenner, *secretary*. The group will assemble at the Walthall Hotel in Jackson, Mississippi, during the evening of June 11. On June 12, an early departure will be made southward to the truck crop areas around Crystal Springs and Hazlehurst. This is the center of the fresh tomato district. Field operations, grading and packing may be observed. Tomato shipments will be at the peak. In the field, observations are being made on the overwintering of bacterial canker of tomato and other tomato diseases. Diseases of beans, carrots, cotton and sweet potatoes will be noted here and in the coastal area. Search is being made for the newly discovered phony peach disease. Departing from the famous health resort at Browns Wells on June 13, visits to pecan groves and nurseries will be made, and the work of the South Mississippi Experiment Station at Poplarville will be noted. Citrus, figs, grapes, peaches, sugar cane and gladiolus will be of interest here. From Hattiesburg on June 14, the tour will include diseases of citrus, pecans and sugar cane, arriving in Biloxi late that afternoon. Visits to truck crop areas, nurseries and to the pecan station will be made on June 16.

For members interested in the collecting of fungi, this tour should afford an opportunity for gathering unusual specimens. The winter and spring seasons have been cool and rainy over much of the state and the conditions may favor a considerable number of plant diseases.

The State Plant Board of Mississippi and the Agricultural Experiment Station have tendered their services in making the tour available to visitors who may come by train. All members, visiting scientists and agricultural workers interested in plant diseases and their control are extended a cordial invitation to meet with the society. Requests for reservations should be addressed to the committee at A. & M. College, Mississippi.

#### AWARD OF THE MEDAL OF THE AMERICAN INSTITUTE OF CHEMISTS TO MR. EASTMAN

THE American Institute of Chemists has awarded its medal "for noteworthy and outstanding service to the science of chemistry and the profession of chemist in America" to Mr. George Eastman. Dr. Frederick E. Breithut, president of the institute, has made the following statement:

Mr. Eastman's research work toward simplifying and popularizing photography was begun in 1883 with his first attempts to make the now well-known roll film, and it was a chemical discovery—the use of nitro-cotton dissolved in the proper solvents—which marked the turning point of his career.

One of the first buildings at Kodak Park was a chemical laboratory and throughout the entire development of his work, Mr. Eastman has always availed himself of the services of trained chemists, and of whatever chemical processes could in any way be useful in his projects. A research laboratory, one of the greatest in the country, was established in 1912 to deal specifically with the fundamentals of photography, and to carry on investigations along all lines of interest to the company. Its accomplishments, in chemistry and physics as well as in photography, were so effective that at present the Eastman Kodak Company is practically a self-contained chemical manufacturing concern. It operates plants for the manufacture of its own acids, silver salts, solvents, gelatine, large-scale production of cellulose nitrate and acetate for all kinds of films, and a unique mill for photographic paper.

The most noteworthy service to American chemistry in Mr. Eastman's career was made in 1918 when he approved the establishment by the Research Laboratory of a department of synthetic organic chemistry to manufacture and supply the various synthetic organic chemicals required for research purposes in the United States. The primary object of this much-needed move was to insure the complete independence of the United States in regard to these essential materials, and it received the cooperation and active support of both industrial and academic chemists throughout the country. Continued cooperation with all available sources of supply and an active production program have increased the number of available chemicals to over 2,600—a number of high quality organic chemicals greater than that of any other country. The value of this work was recognized publicly when the Synthetic Organic Chemical Manufacturers Association, in 1925, made Mr. Eastman an honorary member.

Mr. Eastman has always recognized the great value to him of the chemists of the country and of the institutions in which they were trained. His gifts to the Massachusetts Institute of Technology may perhaps be taken as a direct tribute to the chemists and engineers who came from there to assist him in the building up of his great business. In all, over sixty million dollars have been given by him to educational institutions, especially to the